

IN THE CLAIMS:

Claim 1 (previously canceled)

Claims 2-26 (newly canceled)

Claim 27. (newly amended) A method for determining a mask-fit test pressure to be applied to a wearer's mask by ~~ventilatory~~ ventilatory assistance apparatus, wherein the mask-fit pressure is adaptively determined from prior use.

Claim 28. (previously added) In a continuous positive airway pressure apparatus having an automatic titration mode that delivers a flow of pressurized breathable gas to a patient mask, a method for determining of a mask-fit pressure to be applied to a wearer's mask by the apparatus, said method comprising:

measuring by a pressure sensor the mask pressure used by a patient during a treatment session; and

determining a mask fit test pressure from the pressures used by the patient during the treatment session.

Claim 29. (previously added) A method for determining a mask-fit test pressure to be applied to a wearer's mask by ventilatory assistance apparatus, the method comprising:

determining a percentile pressure of a previous ventilatory assistance session to be said test pressure.

Claim 30. (previously added) The method of claim 29, wherein said percentile pressure is chosen from the range of the 75th-95th percentile pressure.

Claim 31. (previously added) The method of claim 30 further comprising determining a base pressure to be said test pressure if there is no previous percentile pressure available.

Claim 32. (previously added) The method of claim 31, wherein said base pressure is in the range of 10-12 cm H₂O.

Claim 33. (previously added) The method of claim 32, further comprising determining that a previous pressure is available if a pressure ventilatory assistance session occurred for greater than a predetermined time interval.

Claim 34. (previously added) The method of claim 33, wherein said predetermined time interval is three hours.

Claim 35. (previously added) A method for assessing correct fitting of a mask delivering ventilatory assistance, provided by ventilatory assistance apparatus, to a wearer of the mask, the method comprising:

determining a percentile pressure of a previous ventilatory assistance session to be applied as a test pressure;

determining leak flow from said mask at the test pressure; and

displaying or otherwise indicating a magnitude of the leak flow as an indication of correct mask fitting.

Claim 36. (previously added) The method of claim 35, wherein said leak flow is quantized to represent a degree of leak.

Claim 37. (previously added) The method of claim 36, further comprising:
comparing said leak flow against a threshold value representing zero degree of leak; and
determining that there is correct mask fitting if the threshold is not exceeded.

Claim 38. (previously added) The method of claim 36, further comprising determining a base pressure to be applied as said test pressure if there is no previous percentile pressure available.

Claim 39. (previously added) The method of claim 38, wherein said percentile pressure is chosen from the range of the 75th-95th percentile pressure.

Claim 40. (previously added) The method of claim 39, wherein said base pressure is in the range of 10-12 cm H₂O.

Claim 41. (previously added) The method of claim 39, further comprising determining that a previous pressure is available if a pressure ventilatory assistance session occurred for greater than a predetermined time interval.

Claim 42. (previously added) The method of claim 41, wherein said predetermined time interval is three hours.

Claim 43. (previously added) A method for determining a mask-fit positive test pressure to be applied to a wearer's mask by ventilatory assistance apparatus, the method comprising:

determining a percentile pressure of a previous ventilatory assistance session to be said positive test pressure.

Claim 44. (previously added) The method of claim 43, wherein said percentile pressure is chosen from the range of the 75th-95th percentile pressure.

Claim 45. (previously added) The method of claim 43 comprising determining a base pressure to be said positive test pressure if there is no previous percentile pressure available.

bl Claim 46. (previously added) The method of claim 45, wherein said base pressure is in the range of 10-12 cm H₂O.

Claim 47. (previously added) The method of claim 43, further comprising determining that a previous pressure is available if a pressure ventilatory assistance session occurred for greater than a predetermined time interval.

Claim 48. (previously added) The method of claim 47, wherein said predetermined time interval is three hours.

Claim 49. (previously added) A method for assessing correct fitting of a mask delivering ventilatory assistance, provided by ventilatory assistance apparatus, to a wearer of the mask, the method comprising:

determining a percentile pressure of a previous ventilatory assistance session to be applied as a positive test pressure;

determining leak flow from said mask at the positive test pressure; and

displaying or otherwise indicating a magnitude of the leak flow as an indication of correct mask fitting.

Claim 50. (previously added) The method of claim 49, wherein said leak flow is quantized to represent a degree of leak.

Claim 51. (previously added) The method of claim 49, further comprising:
comparing said leak flow against a threshold value representing zero degree of leak; and
determining that there is correct mask fitting if the threshold is not exceeded.

Claim 52. (previously added) The method of claim 49, further comprising determining a base pressure to be applied as said positive test pressure if there is no previous percentile pressure available.

Claim 53. (previously added) The method of claim 52, wherein said percentile pressure is chosen from the range of the 75th-95th percentile pressure.

Claim 54. (previously added) The method of claim 52, wherein said base pressure is in the range of 10-12 cm H₂O.

Claim 55. (previously added) The method of claim 49, further comprising determining that a previous pressure is available if a pressure ventilatory assistance session occurred for greater than a predetermined time interval.

Claim 56. (previously added) The method of claim 55, wherein said predetermined time interval is three hours.

Claim 57. (newly added) The method of claim 27, wherein the mask-fit test pressure is determined based on a prior use by comparing leak flow to a threshold leak flow value.

Claim 58. (newly added) The method of claim 57, wherein leak flow is determined over a predetermined time period.

Claim 59. (newly added) The method of claim 58, wherein the leak flow is determined based on a time constant of about 10 seconds.

Claim 60. (newly added) The method of claim 27, wherein the method is practiced with a CPAP device having two functional modes.

Claim 61. (newly added) The method of claim 27, wherein determining the mask-fit pressure includes sampling pressure signals in a gas supply assembly associated with the mask.

Claim 62. (newly added) The method of claim 61, wherein sampling pressure signals occurs in a delivery tube of the gas supply assembly.

Claim 63. (newly added) The method of claim 61, wherein sampling pressure signals occurs in a blower of the gas supply assembly.

Claim 64. (newly added) The method of claim 61, wherein sampling pressure signals occurs at predetermined intervals.

Claim 65. (newly added) The method of claim 64, wherein the sampling occurs at about 20 millisecond intervals.

Claim 66. (newly added) The method of claim 61, wherein sampling the pressure signals includes determining a flow of gas in the mask and generating a delivery pressure signal.

Claim 67. (newly added) The method of claim 61, wherein determining the mask-fit pressure also includes processing the sampled pressure signals and producing a control signal based on the processed signals, wherein the control signal is provided to a motor to provide a determined treatment pressure.

Claim 68. (newly added) The method of claim 67, further comprising comparing a signal representative of actual delivery pressure with the control signal.

Claim 69. (newly added) The method of claim 27, further comprising varying at least one setting relating to test pressure intervals, test pressure period, and determined test pressure.
